North American Drought Monitor – May 2006

CANADA: Most of the agricultural areas of Canada began the growing season with near normal or above normal precipitation and positive growth prospects. While the majority of the agricultural landscape of Canada looks very favourable there still remain a few areas of concern.

In the past month Atlantic Canada has reported above average precipitation resulting in improvements to stream flow and groundwater levels, which were causing minor water supply concerns in previous months. The abnormally dry designation from the previous month has been removed from this region.

In Alberta, significant precipitation occurred throughout much of the northern part of the province, which resulted in marked improvement and raised confidence for this year's crop, especially in the Peace River and Northwest agricultural regions. The D1 and D0 designated areas declined considerably due to the abundant rainfall during May. However, pasture land and ground water continued to be a concern and were still in an abnormally dry to moderate drought status.

As with Northern Alberta, northern regions of British Columbia received significant rainfall throughout the month, and this resulted in improved moisture conditions and relieved the concern over drought. A small region of the central interior of British Columbia remained relatively dry and was designated with a D0 classification.

UNITED STATES: Heavy rains eliminated dryness in the Great Lakes region and New England this month, but below-normal rainfall along with above-normal temperatures allowed drought to continue or even worsen in the Southwest and parts of the High Plains. Near-record low rainfall in South Dakota and Nebraska led to development of D2 drought in central South Dakota and western Nebraska, while spotty rainfall and above-normal temperatures led to rapid mountain snowmelt and reduced soil moisture in Colorado and expansion of D2 drought across eastern Colorado. D3 drought in the Southwest joined with the D3 area in northern Texas and western Oklahoma, bringing D3 intensities to much of New Mexico. In contrast, heavy showers reduced D4 drought in southern Texas and D2 drought along the Gulf Coast. Rainfall totaled less than 50% of normal from Louisiana into southern Mississippi, allowing D2 drought to expand in both states. Despite some scattered heavy showers, D1 drought expanded across Florida's central peninsula, where fire danger remained high. D1 drought continued from South Carolina into southern Virginia, as below-normal rainfall extended from the interior Carolinas into the mid-Atlantic region.

The drought in the southern Plains contributed to marked declines in the winter wheat crop, with national hard red winter wheat production forecast to decline by 29% from last year's levels. Substantial losses are forecast in Oklahoma and Texas, with expected declines of 47% and 66% respectively.

MEXICO: May saw some changes in the rainfall distribution pattern in Mexico. The nationwide areally-averaged precipitation for the month totaled 48.9 mm (1.93 inches), representing 122% of the long-term average of 40 mm (1.57 inches, defined for the period 1941-2005). The Mexican Meteorological Service (SMN) ranked May 2006 as the 17th wettest May since 1941 (as a reference, May 2000 was the wettest May since 1941 with an areal average of 68.9 mm, or 2.71 inches). Two cold frontal systems during the middle of the month favored some rainfall events in the northern part of the Baja California peninsula, as well as portions of northern and central México, including the Mexico City vicinity. These rainfall events brought some relief to portions of Chihuahua, Sinaloa and Durango, the states more affected by drought since the beginning of the present year. These frontal systems also produced mild temperatures in northeastern and eastern Mexico (Nuevo León, Tamaulipas and Veracruz). In the eastern north Pacific the tropical cyclone season started with the development of Tropical Storm Aletta near Guerrero (south of Acapulco) during the last days of May, favoring some rains along the coast. During the second half of May, the coast of Chiapas in southeastern Mexico experienced some events of intense rainfall that produced floods over the same areas affected by extreme rains last October. The National Water Commission reported that Baja California Peninsula, Lerma-Santiago-Pacífico and Valle de Mexico Hydrological Administrative Regions measured precipitation that was 429%, 402% and 153% above normal, respectively. Despite the wet conditions observed in May, Northwest Mexico continued experiencing long-term dry conditions, as indicated by the 12 month SPI map.

During May, drought intensity continued increasing in northwest Mexico, the D4 area over Sinaloa and Sonora expanding northward to join the D4 area in southern Arizona. Conditions deteriorated in northern Coahuila, where severe drought (D2) conditions extended southward and westward. May rainfall in central Mexico eroded the D3 area (extreme drought) over the Jalisco, Guanajuato and Michoacán limits (Lerma-Chapala basin). Some improvements are also observed in southern Nuevo León, southern Tamaulipas and most of San Luis Potosí as the abnormally dry conditions (D0) retreated northward. Conditions also improved over Guerrero and Oaxaca states, where the D0 category was removed. Finally, the abnormally dry conditions (D0) across the Yucatan peninsula were also removed.

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